ROMs from Micro Cornucopia

There are two ROMs in each Kaypro, a monitor ROM and a character ROM. The Monitor ROM supplies information for the Z80 processor on such things as how to get information from the disk drives, and which character to use as a cursor. The character ROM works entirely in the video circuit and it determines what the characters look like on the screen (for instance, does the "f" have a high, small cross bar, or a lower, longer one of the Micro C character ROM). When you speed up your Kaypro, you are speeding up the processor clock so you have to use a monitor ROM that will also run at the higher speed. You are not changing the video clock when you speed up the Kaypro so you don't need to change the character ROM (unless you want the nicer looking character set). Since the monitor ROM tells the processor how to do disk accesses you are going to have to change that ROM in order to upgrade to larger drives.

Pro-Monitor II for Kaypro II

1. This ROM is a fast part so you can run 4 or 5 MHz with your Kaypro II.
2. It gives you a non-blinking block cursor (much less irritating), though you can specify a standard blinking underline if you prefer it.
3. It does faster disk accesses (even if you don't speed up your system).
4. It throws away null characters (those little asterisks that sometimes garbage the screen during data communications).
5. Includes complete printed instructions for simple plug-in installation (takes 5 minutes).

Pro-Monitor 4 for Kaypro 4

This ROM does everything the Pro-Monitor II does, only it's for a Kaypro 4. Though the ROM that comes in your Kaypro 4 will run 4 or 5 MHz (unlike the ROM that comes in the II), this ROM also gives you:

1. Non-blinking block cursor.
2. Faster disk accesses.
3. Throws away null characters.
4. Complete printed instructions for simple plug-in installation (takes 5 minuntes).

Pro-Monitor 8 package for Kaypro 4

This ROM package does everything the Pro-Monitor II and 4 do (it will run at 5 MHz, ignores nulls, has the fast disk accesses). In fact, even if you will be using your original 191K or 390K drives for now, you can use this ROM package.

The Pro-Monitor 8 features include:

1. You get 784K per disk with quad density (96 tpi, double sided) Tandon 100-4 (or equivalent) drives.
2. You can use any combination of Tandon 100-1 (Kaypro II), 100-2 (Kaypro 4), or 100-4 drives as drives **A and B**.
3. You can boot from any disk with normal system tracks (Kaypro II, Kaypro 4, or Kaypro 8). The disk needs no modification.
4. You can choose any character (including space) as a cursor and you can choose to make the character blink or not blink. Plus, you can change the cursor at will.
5. You get a disk which contains a new copy routine for copying and formatting 784K disks, and a drive diagnostic routine for checking out the quad density drives.
6. You get complete printed instructions for installation of ROM and drives (takes 10 to 15 minutes, including drives).
7. The installation requires no cuts or jumpers, everything simply plugs into a Kaypro 4. (If you have a Kaypro II, see the modification article in Micro-C issue 15 to turn your II into a 4.)

Pro-Character ROM (for Kaypro II and 4)

The character ROM gives you a nicer looking character set. Kaypros have come with two different character ROMs, the early character ROMs had a rotten g, y, q, f, and t as well as commas and semi-colons that were hard to tell from periods and colons. On the newer systems (manufactured since Sept 83) half of the characters (notably the g) have been improved, but they haven't gone all the way. Also, many of the older character ROMs were poor quality parts so they generated snow as information scrolled up the screen. This white flecky snow disappears when you install a Pro-Character ROM.

The character ROM comes in two flavors:

1. The standard Greek Pro-Character has the nicer character set plus the standard Kaypro Greek characters.
2. The Clean Pro-Character has the nicer character set but no Greek characters. This is the ROM for people who get strange Greek characters on the screen when interfacing with Mainframe systems.
3. Complete printed instructions for simple plug-in installation (takes 5 minutes).

Note: These ROMs will not work in the Kaypro 10 or the latest Kaypro 4 with graphics (it contains the Kaypro 10 board). We are working on new ROMs for these systems.

Prices:

Pro-Monitor II	29.95
Pro-Monitor 4	29.95
Pro-Monitor 8 (package)	49.95
Pro-Character (either Greek or Clean)	29.95
Pro-Set II (Pro-Monitor II & Pro-Chracter)	55.00
Pro-Set 4 (Pro-Monitor 4 & Pro-Chracter)	55.00
Pro-Set 8 (Pro-Monitor 8 package & Pro-Chracter)	70.00

Pro-8 ROM Package

The PRO-8 package from Micro Cornucopia upgrades your KayPro 4 to a KayPro 8 with 784K bytes (96 directory entries) per Tandon 100-4 (or equivalent) quad-density drive. Plus, you can select your own cursor character (and change it at will).

The package includes the new PRO-8 monitor ROM, a disk of formatters and copiers, and printed instructions. (We even tell you how to turn your KayPro II into a KayPro 4.) All you add is one or two double-sided double-density (390K), or double-sided quad-density (784K) drives. You get over 1.5 Megabytes on a **two-drive** quad-density system!

This new system can read, write, and format KayPro II and KayPro 4 disks as well as KayPro 8 disks. And it recognizes each disk type automatically!

All this for only $49.95!

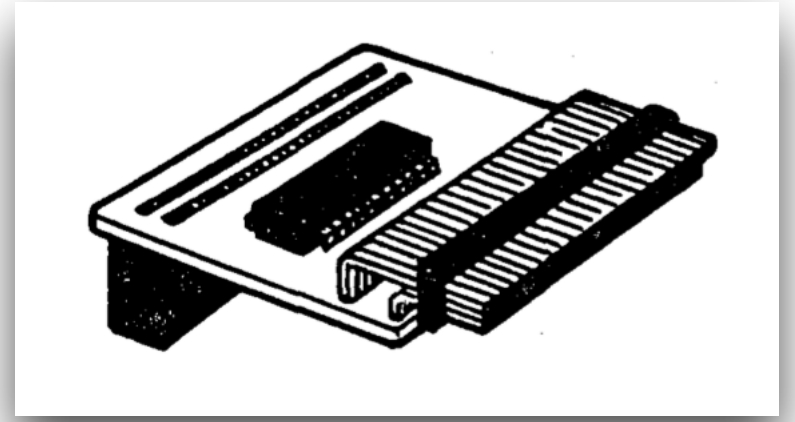
Source: Micro Cornucopia, Issue 16, February 1984, page 38

Plus-4 Decoder Board

With this nifty little plug-in board, your Pro-8 ROM can access up to four 5.25" drives. You just plug a four-drive 34-pin cable into this board and you can add up to two additional drives.

Now you can run any mix of 191K, 390K, and 784K drives as **drives A, B, C, and D**. You can run your original drives as A and B and then add 380K or 784K drives outboard as C and D. You can even run four half-wides inside your original Kaypro!

The Plus-4 Decoder Board for only $39.95. Watch for 4-84 and 10-84 compatible ROMs coming soon.



Source: Micro Cornucopia, Issue 18, June 1984, page 47

SPECIAL PRO-884 NOTE

The Pro-884s are sensitive to the version of CP/M you are running.

1. Neither the Pro-884 nor the Pro-884 Max will run on CP/M 2.2U. However, if you can locate a CP/M 2.2F or 2.2G system disk (your dealer should have a copy) You should be able to run our 884 monitors. (Don't try to boot F or G before you change monitors.)
2. There are two distinct versions of CP/M 2.2G. Only the Pro-884 Max is sensitive to the version of 2.2G you have - it's the ZCPR in ROM that's the problem. (If you have CP/M 2.2F then you have a Normal CP/M.) So, before ordering the Max, boot up your original system disk and read the sign-on. If it's CP/M 2.2G then we need to know whether it's the high (normal) version or the low (minus) version.

To determine your G version (you'll become a G Whiz!):

```
A DDT cr
*LS cr
(ddt's response)
```

The first line of the response will be a JMP D600 or a JMP D800. The JMP D600 means that you have a low (minus) version, and the JMP D800 means that it's a normal version. When you order your Pro-884 Max, be sure to specify whether you want the normal Max or the minus Max. Otherwise, we'lI just guess that you need the normal Max.

Pro-8 Version 2 for Kaypro 4

Guess what we've just upgraded. The venerable Pro-8 now has a version 2 and it's really neat! The new features include:

1. Screen dump with selectable dump character.
2. Select slow or fast step rate for each drive.
3. ROM that automatically figures out what type of drive you are using.
4. No more delays when using both single and double sided disks.
5. And, it's still only $49.95 for ROM, disk, and manual!

Of course, you get all the original Pro-8 features such as: user selectable cursor (blinking or not), ignores nulls, and your choice of **1-4 drives** of the 191K, 390K, and 784K variety. (Use of 3 or 4 drives requires drive decoder.)

Installation requires no cuts or jumpers. The ROM simply plugs into a Kaypro 4-83 (or II-83 with a Kaypro 4 processor board). If you have a Kaypro II with the original II processor board then you must do the II to 4 upgrade. See issue #21 for details. Your Kaypro II has the original II board if the monitor ROM (a 20-pin chip with paper stuck to its top) is marked with 81-149. The 4 ROM is marked 81-232.

If you already have a Pro-8, you can upgrade to version 2 for half price. Call or write for details.

Pro-884 Monitor

The long-awaited PRO-8 ROM for the Kaypro 2-84 and 4-84s is ready! You have not saved your nickels and dimes in vain!

The PRO-884 ROM does everything your old Kaypro ROM does, plus it:

1. Gives you 784k bytes of storage per disk (with quad-density 80-track, double-sided drives).
2. Uses any combination of Kaypro II, IV, or quad-density drives.
3. Includes software to let you format and copy II, IV, or quad-density disks.
4. Comes with complete printed instructions on ROM installation and tips on installing quad-density drives.

5. Runs up to four drives with the Plus-4 Decoder Board.

Installation of ROM takes just five minutes and requires no cuts or jumpers.

Pro-884 Max Monitor

The ROM that does everything but wash the dishes is here! There's so much stuff in this ROM, even we didn't think it would fit! The PRO-884-MAX ROM does everything the PRO-884 does, PLUS IT:

1. Emulates a DEC VT-52 or Heath H-19 video terminal (both the display and keyboard).
2. Does FASTER screen output.
3. Has ZCPR1 in ROM, eliminating the need for a system disk in drive A: during a warm boot.
4. Dumps the screen to your printer at the touch of a single (user definable) key.
5. Sends characters going to the screen to your printer regardless of the program you are running.
6. Displays the time on the Kaypro's status line (Kaypro 4-84s only). Because of battery backup, the time does not have to be re-entered each time you power up.
7. Inserts the time and date into text while you are running your favorite text editor (4-84 only).

Prices:

Pro-8 Version 2 Pkg.	49.95
Pro-884 Pkg.	59.95
Pro-884 Max Pkg.	79.95

Source: Micro Cornucopia, Issue 23, April 1985, page 71